VSim 2.0 Abridged Users Guide

VSim facilitates the real-time exploration and educational use of highly detailed, academically generated three-dimensional computer models. The VSim software and the companion VSim Repository and Archive were funded by the National Endowment for the Humanities (HD-50958-10 and HK-50164-14) and UCLA's Office of Information Technology/Institute for Digital Research and Education. The online VSim Repository and Archive (*vsim.library.ucla.edu*) was created in partnership with the UCLA Digital Library Program for the dissemination of 3D content across grade levels and humanities disciplines.

The following is an abridged guide for using VSim 2.0 to successfully interact with 3D models as part of your research or classroom presentations. It covers VSim's three major components: general navigation tools and settings, the narrative feature, and the embedded resources feature.

At first launch, the VSim interface appears deceptively simple (upper left image), but it facilitates sophisticated interactions with academically generated real-time models. Above, the Street of Cairo installation from UCLA's reconstruction of Chicago's World's Columbian Exposition of 1893 is shown in a screenshot captured during a flight session. The Narrative Bar across the top of the simulation window shows thumbnails from a linear presentation describing the construction of the concession, and the Embedded Resources Bar across the bottom shows the material available for interrogation by the user. At right, images from a private collection and the Ryerson and Burnham Library at the Art Institute of Chicago that have been embedded in the model to enrich the learning experience.

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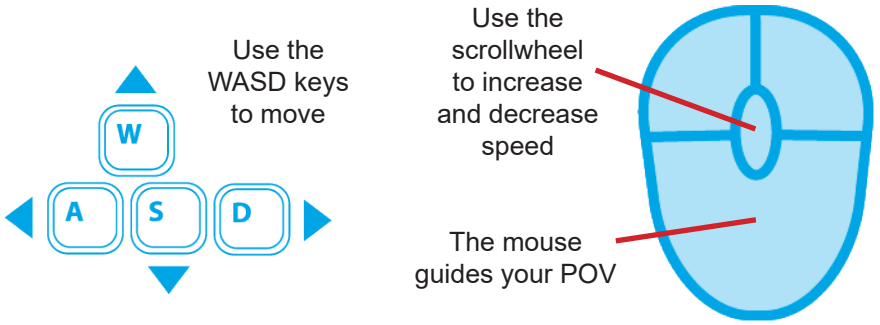
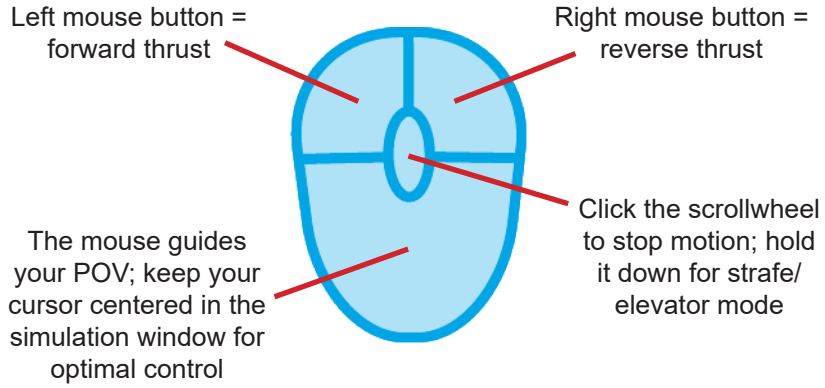
Before all else, learn the NAVIGATION controls!

VSim's navigation tools facilitate real-time interaction with 3D content in first person (WASD), flight simulation, or Google Earth-style object rotation mode. In all modes, the spacebar toggles between **freeze** (so that you can interact with the narratives and embedded resources) and **unfreeze** (so that you can navigate through the environment). In both first person and flight mode, the 'G' key toggles ground mode on and off to tether you to the ground at pedestrian height.

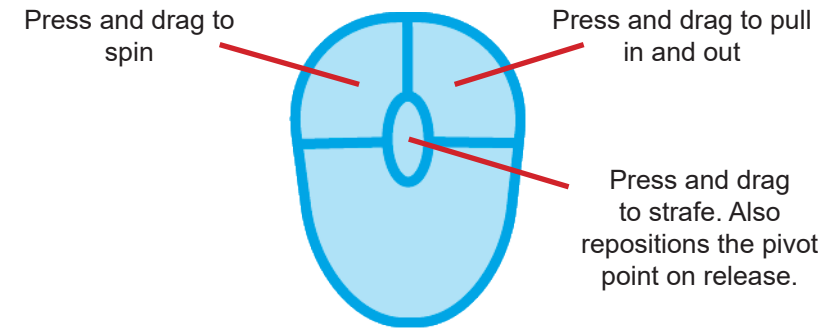
Press '1' for first person (WASD) mode



Press '2' for flight mode



Press '3' for object mode



'F1' Displays Hotkeys

1 First person (WASD) mode
2 Flight mode
3 Object mode
Spacebar = Freeze/Unfreeze
(Freeze to engage with the narratives and resources, Unfreeze to navitage through the environment)
G Ground mode on/off
C Collision on/off
= Increase speed
- Decrease speed
R Reset viewing position to home
F1 and H = Help and hotkeys menu
T Time slider controls
E Switch menu
L Lighting on/off
X Texturing on/off
Y Simulation statistics
; Draw mode: fill/wireframe/point-cloud
P Play/pause narrative
Esc = Stop playing narrative
Left Arrow = Previous node
Right Arrow = Next node
M Model outliner on/off
J History window on/off

REMEMBER ...

SPACEBAR Freeze/Unfreeze

G Ground on/off

C Collision on/off

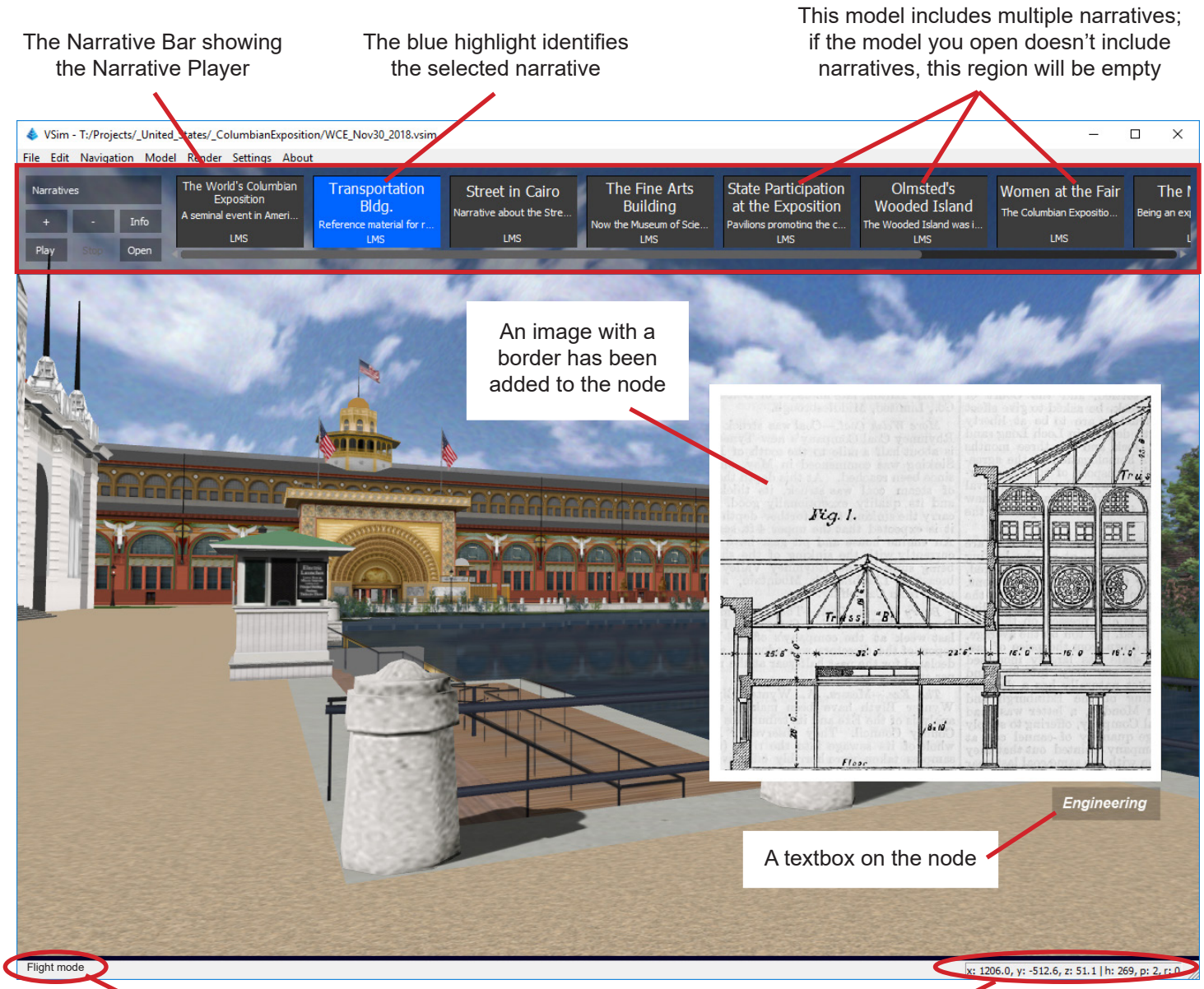
F1 Help/Hotkeys

The Narrative Feature

The narrative feature of VSim was specifically constructed for classroom presentations. A narrative is essentially a linear path through a 3D environment that is constructed of a sequence of nodes. This allows you to use the 3D environment as the basis for a presentation akin to PowerPoint or Prezi, but with nodes in the 3D space instead of 2D slides.

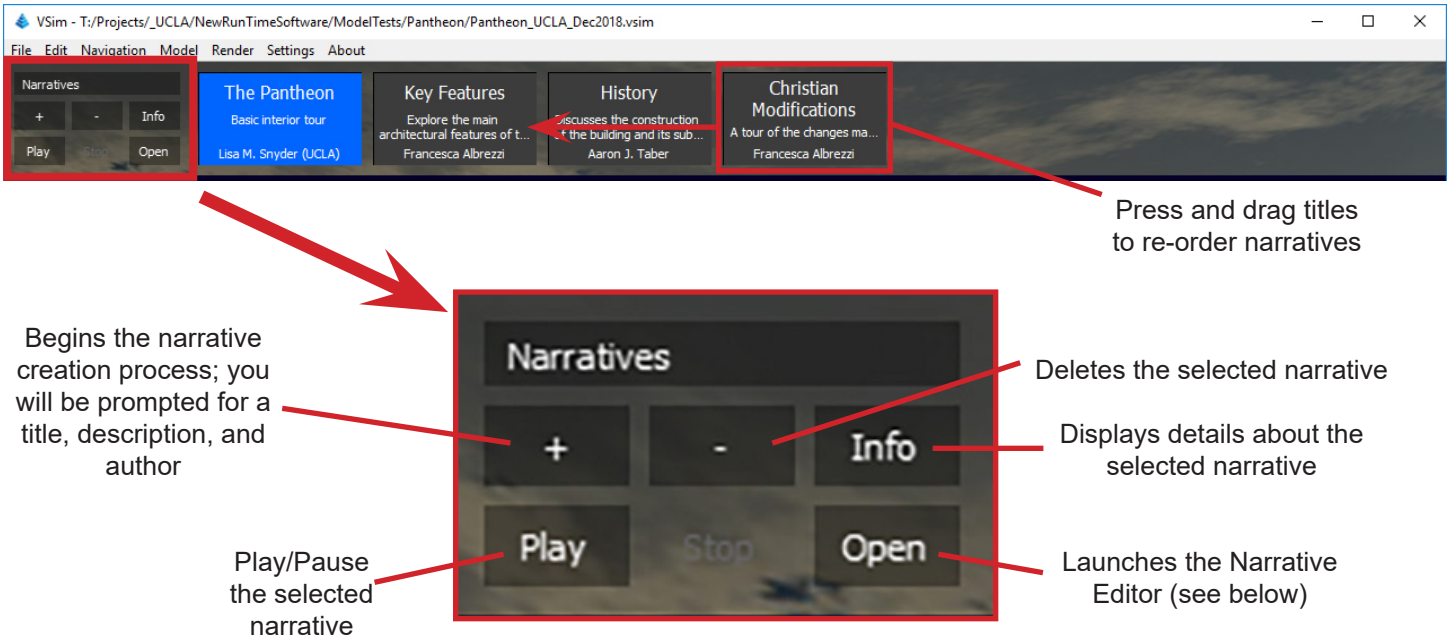
There are three components to the narrative feature: the Narrative Player, the Narrative Editor, and the Node Editor. You can access these three components from the Narrative Bar across the top of the simulation window.

1. The **Narrative Player** is the first level of the narrative feature. A model may come loaded with narratives, or you may build your own (see following pages for basic instructions). If narratives are loaded, you'll see their titles in the boxes. Click the title once to select a narrative, and use the 'Play' button to start the sequence. During playback, the 'P' key toggles between play and pause. Press 'Open' to see the thumbnails of the narrative nodes in the Narrative Editor.
2. The **Narrative Editor** displays the nodes that compose the narrative. Within the Narrative Editor, you can add, delete, and rearrange nodes; and adjust the timing on both the nodes themselves and the transitions between them.
3. The **Node Editor** allows you to add overlay text and images onto a node. Use the four styles provided for consistant visuals, or customize them to match the mood and palette of your model.



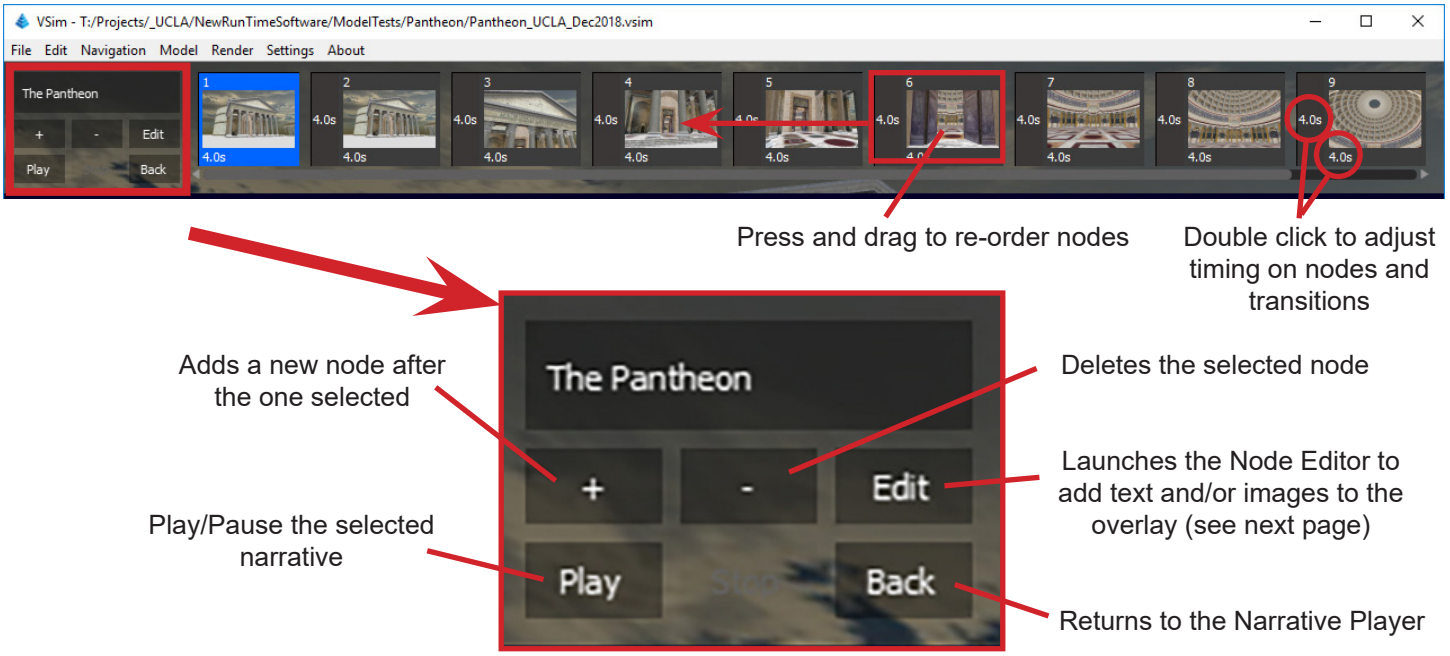
The Narrative Player

When the Narrative Bar along the top of the simulation window displays titles, the controls govern the Narrative Player. The Narrative Player displays the titles of narratives that are loaded, if any. The example below shows fours narratives. You can minimize and scale the Narrative Bar by dragging the bottom edge of the bar up and down.



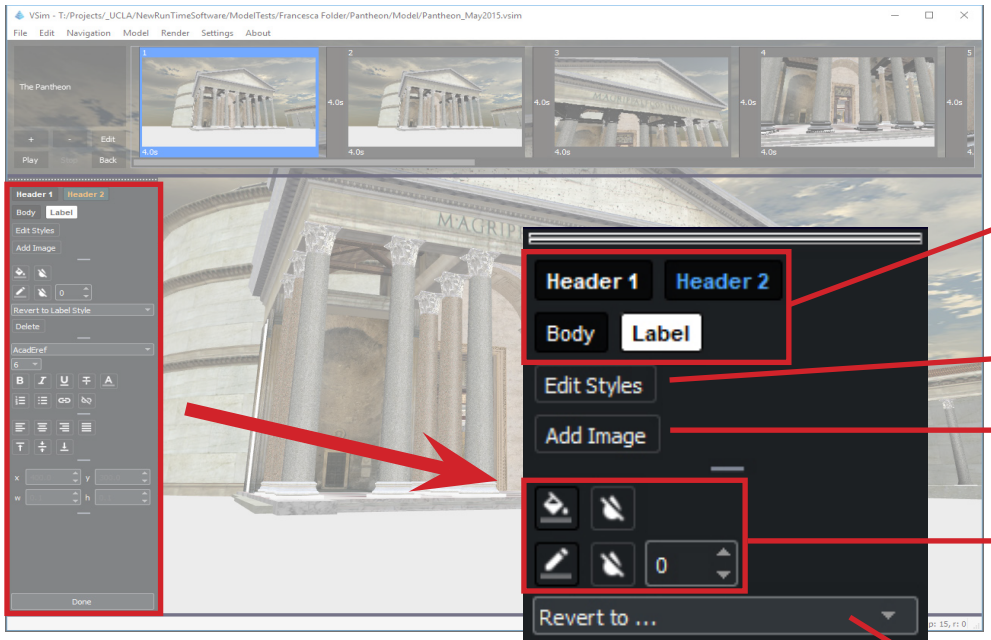
The Narrative Editor

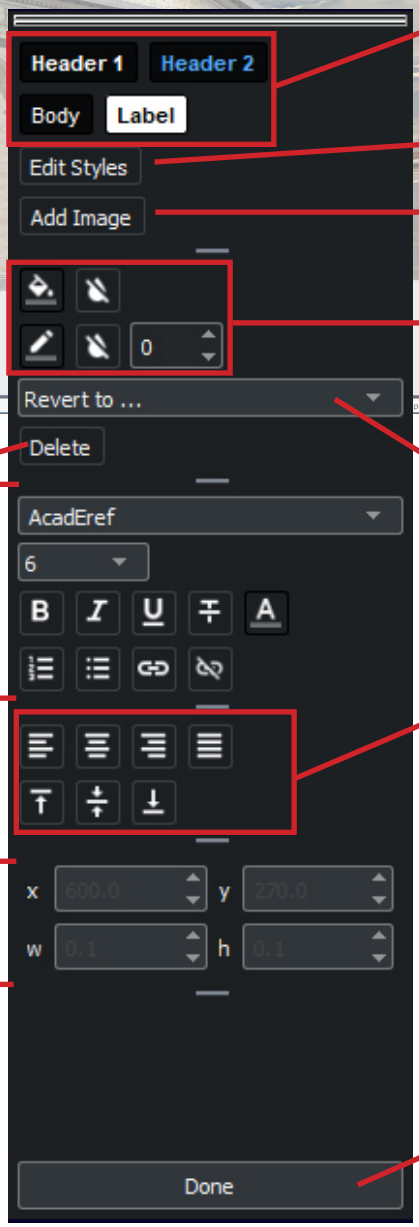
When the Narrative Bar along the top of the simulation window displays thumbnails, the controls govern the Narrative Editor. The Narrative Editor displays the nodes that make up a narrative. A narrative is essentially a linear path through a 3D environment that is constructed of a sequence of nodes. This allows you to use the 3D environment as the basis for a presentation akin to PowerPoint or Prezi, but with nodes in the 3D space instead of 2D slides. You can minimize and scale the Narrative Bar by dragging the bottom edge of the bar up and down.



The Node Editor

Selecting a node and pressing 'Edit' from the Narrative Editor launches the Node Editor. The Node Editor allows you to add text and imagery as overlays onto the nodes that will appear during narrative playback. Four font styles are available for you to use and/or customize.





Adds a textbox to the node in one of four styles (Header 1, Header 2, Body, and Label)

Launches the settings dialog box to edit the four active styles

Adds images to the node

Changes the color and opacity of the textbox background and border

Deletes the selected item

Changes selected text to one of the four active styles

Changes the font, size, attributes, and color of the text, and sets or deletes hyperlink settings

Changes the text layout and position within the textbox

Sets the textbox or image size and position

NOTE: When this control panel is visible, only the NODE EDITOR controls are functional

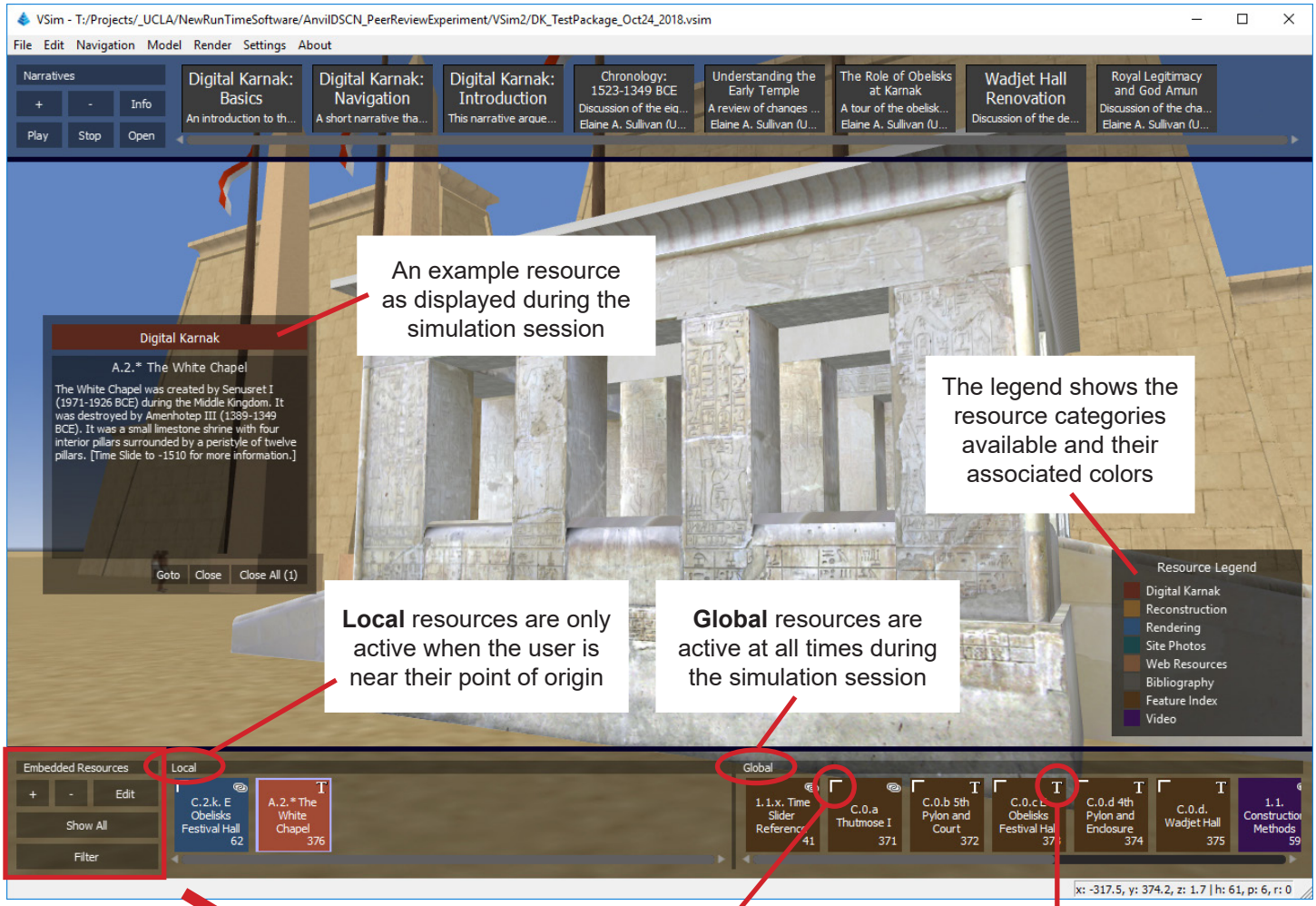
Exits the Node Editor

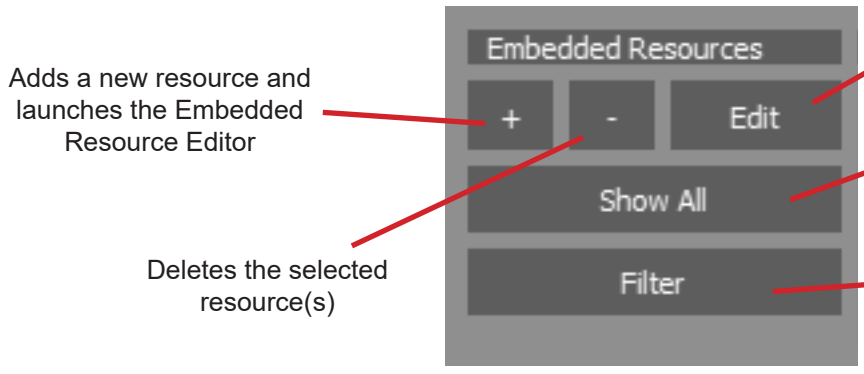
To save your narrative as a standalone file, click 'File -> Export Narratives ...'

See the full VSim guide for more information on saving and exporting options.

The Embedded Resources Feature

The bar along the bottom of the simulation window controls the Embedded Resources. The Embedded Resources feature was designed to enable annotation of the 3D environment. Resources can be simple textual annotations, or include links to digital files and web resources. They can be searched and filtered. The default view splits the display of embedded resources according to which are **local** (i.e., spatially aware) and which are **global** (i.e., available to the user at all times). The Embedded Resources Bar can be minimized and scaled by dragging the top edge of the bar up and down.

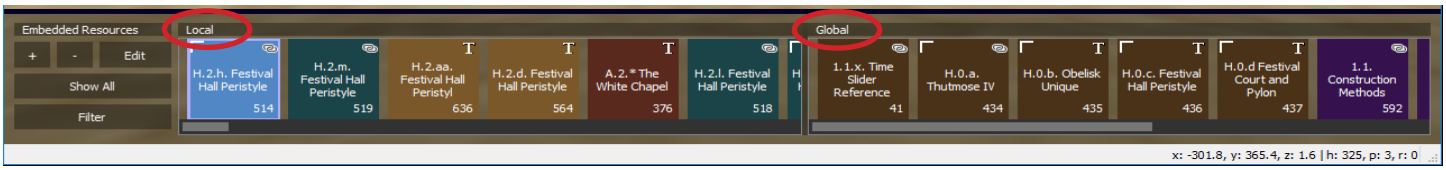


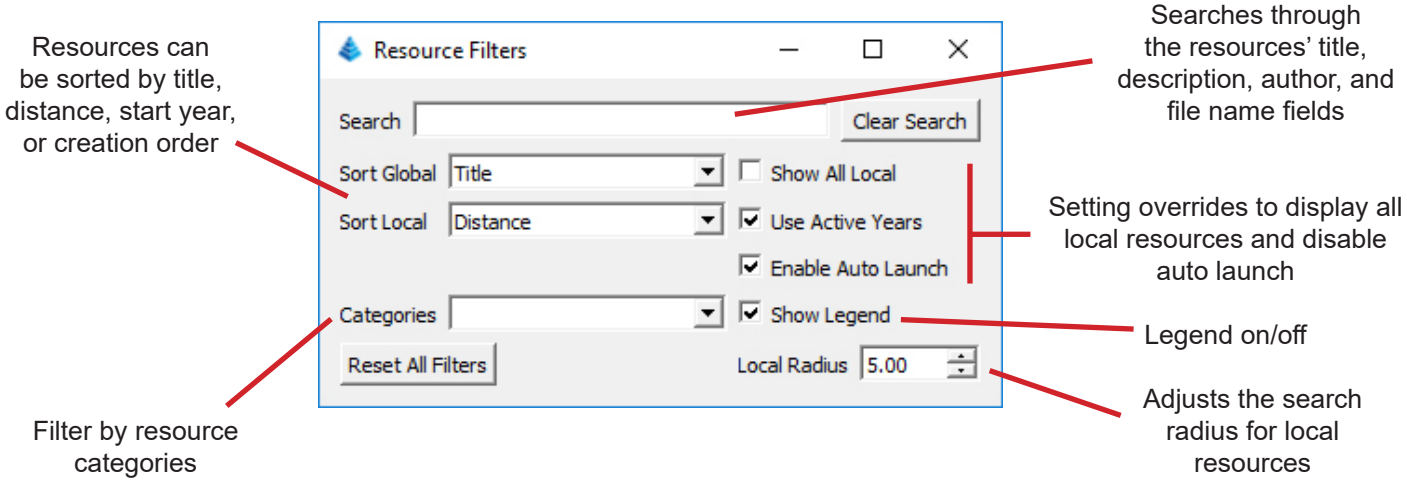


Managing and Filtering Resources

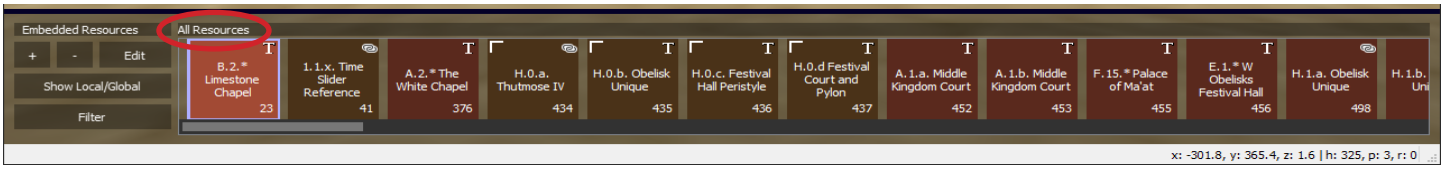
The VSim default view splits the display of resources according to which are **local** (i.e., spatially aware) and which are **global** (i.e., available to the user at all times). Filtering can further control the resources displayed during interaction. Clicking 'Show All' shows all resources in one display window.

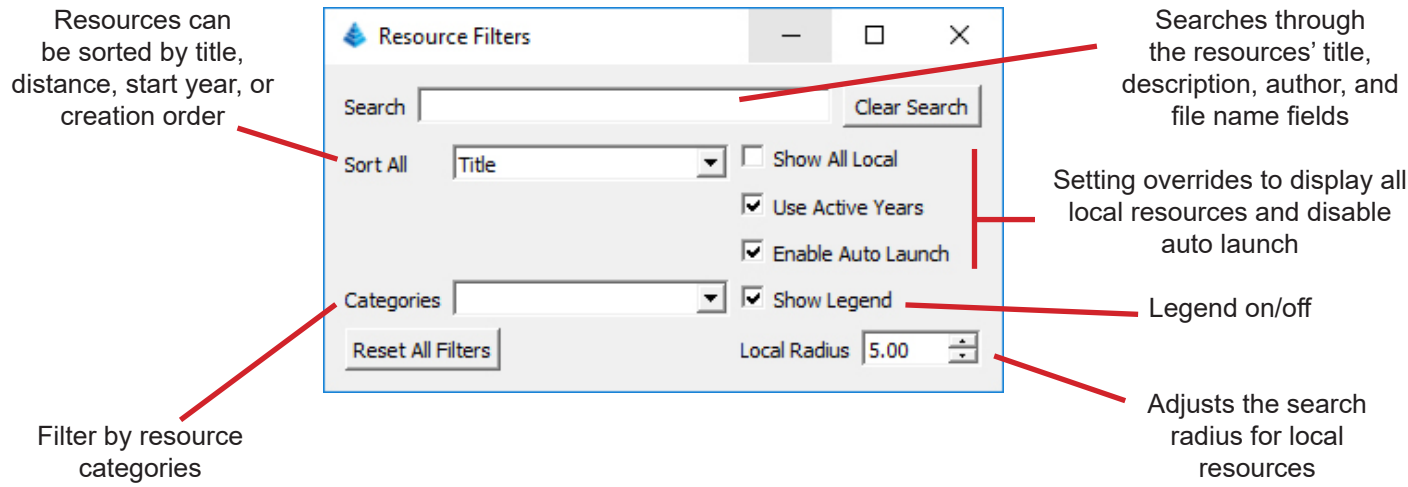
Local/Global Embedded Resources Display





'Show All' Embedded Resources Display

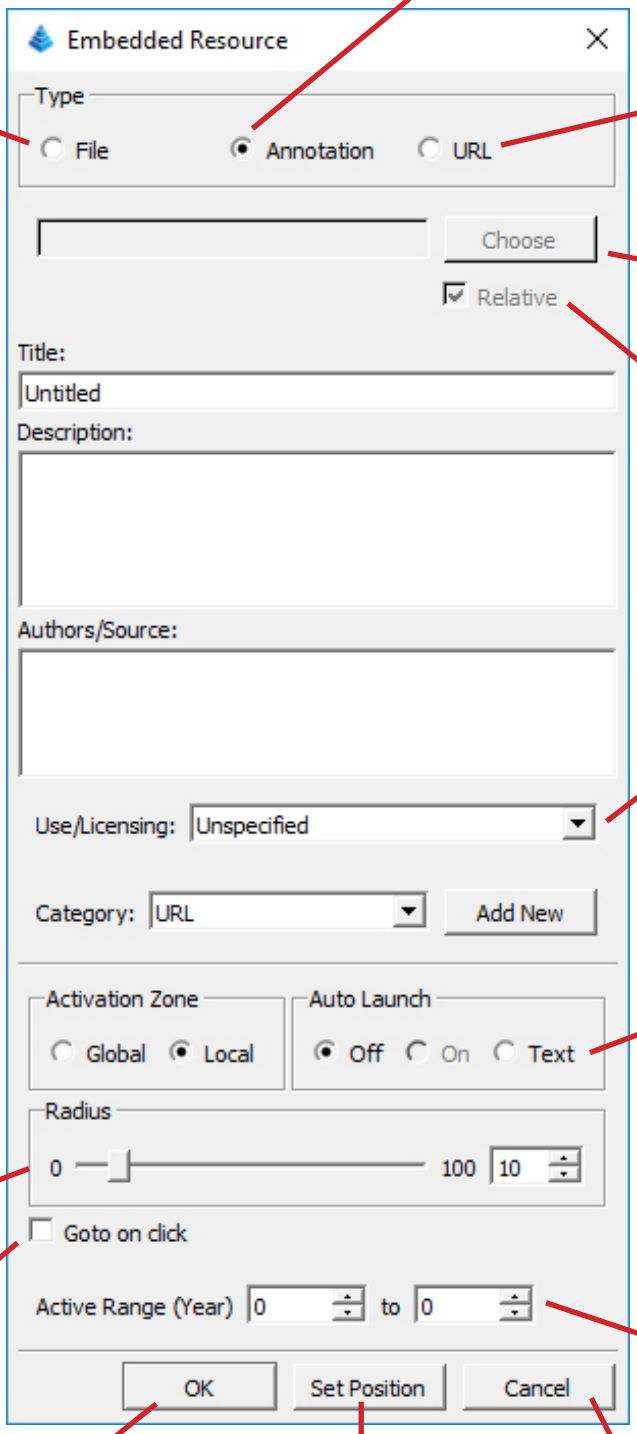




To save your embedded resources as a standalone file, click 'File -> Export Resources ...'

See the full VSim guide for more information on saving and exporting options.

The Embedded Resource Editor



Choose if the resource is only text

Choose if the resource includes a link to a external file (e.g., an image or pdf)

Choose if the resource includes a link to an online resource

If the resource includes a file or web link, either paste the URL or browse for the file location

The title field is displayed in the Embedded Resources Bar during all user interaction

Select if you want the file path of the resource to be relative to the location of the primary .vsim file (this allows you to package files for distribution with your model)

The description is displayed when the resource launches

The author/source field can be used for bibliographic information

Select the most appropriate licensing statement for the content of the resource

All resources must be assigned to a category; choose from the dropdown menu or click 'Add New'

For local resources only: If **Off**, the user must manually click to launch the resource; if **On**, the resource will automatically launch when the user enters the activation zone, along with the associated file or web link; if **Text**, only the text description will automatically display

Choose whether the resource should be considered local or global

For local resources, sets the size of the activation zone

If selected, when the user selects this resource, their view will be re-oriented to the saved position of the resource

If the model includes multiple time periods, this sets the range during which the resource will be active

Accepts changes to the resource

Resets the location and viewing position for the resouce

Cancels changes to the resource

The VSim Project Team

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